

PATENT

Atty. Dkt. No. YOR920010137US1

**IN THE CLAIMS**

1. (Currently Amended) A method for automating contract negotiation between a ~~plurality of parties~~ first party having a first computing system and a second party having a second computing system, each of the ~~plurality of parties having at least one~~ first computing system and the second computing system being coupled to a communications network and having one or more applications running thereon, the method comprising the steps of:

establishing a common negotiation protocol that specifies negotiation operations, the negotiation protocol being agreed upon by the ~~plurality of parties~~ first party and the second party prior to the contract negotiation;

conducting a pre-negotiation between the ~~plurality of parties~~ first party and the second party to form a negotiation meta contract to control the contract negotiation, in accordance with the negotiation protocol, wherein the meta contract is formed at least in part from information provided by at least one of the ~~plurality of parties~~ first party and the second party in at least one electronic document, prior to the negotiation;

communicating a request to negotiate; and

conducting ~~an automatic~~ a fully automated negotiation, according to the negotiation meta contract, between the one or more applications ~~[[of]]~~ running on each of the ~~plurality of parties~~ first computing system and the second computing system,

wherein each of the ~~plurality of parties~~ first computing system and the second computing system maintains a contract state of the negotiation.

2. (Cancelled)

3. (Original) The method of claim 1, further comprising the step of performing at least one sub negotiation.

4. (Original) The method of claim 1, further comprising the step of forming an electronic commerce contract.

PATENT

Atty. Dkt. No. YOR920010137US1

5. (Currently Amended) The method of claim 1, wherein ~~one of the plurality of parties~~ the first party is a service provider having a service application on the first computing system, which is a server computer system, and ~~another of the plurality of parties~~ the second party is a service requester having a requester application on the second computing system, which is a client computer system.

6. (Original) The method of claim 1, further comprising the step of providing for a suspend-negotiation action to take place to enable human intervention during the negotiation.

7. (Cancelled)

8. (Currently Amended) A method for conducting a negotiation between a plurality of parties first party having a first computer system and a second party having a second computer system, each of said ~~plurality of parties having a first computer system and the second~~ computer system being coupled to a communication network and having one or more applications running thereon, the method comprising the steps of:

providing a specification of machine-executable rules of negotiation for the ~~plurality of parties~~ first computing system and the second computing system for generating at least one contract, the specification being agreed upon by the ~~plurality of parties~~ first party and the second party prior to conducting the negotiation; and

conducting a pre-negotiation between the ~~plurality of parties~~ first party and the second party to form a starting state for a contract in accordance with the specification, wherein the starting state is formed at least in part from information provided by at least one of the ~~plurality of parties~~ first party and the second party in at least one electronic document, prior to the negotiation, the at least one electronic document being selectable from one of: a previous contract, a publicly defined template, and a template defined prior to the negotiation by one of the ~~plurality of parties~~ first party and the second party; and

conducting a fully automated negotiation, according to the starting state, between the one or more applications running on each of the first computing system

PATENT

Atty. Dkt. No. YOR920010137US1

and the second computing system,

wherein each of the ~~plurality of parties~~ first computing system and the second computing system maintains a contract state of the negotiation.

9. (Previously Presented) The method of claim 8, wherein the starting state is selectable from a set of profiles published in a repository by at least one of the plurality of parties prior to the negotiation.

10. (Previously Presented) The method of claim 8, wherein the publicly defined template is an electronic commerce business-to-business purchasing standard.

11. (Original) The method of claim 9, wherein the repository is a service broker public registry.

12. (Currently Amended) A method for conducting an automatic negotiation between a ~~plurality of parties~~ first party having a first computer system and a second party having a second computer system, each of said ~~plurality of parties having a first computer system and the second computer system~~ being coupled to a communication network and having one or more applications running thereon, the method comprising the steps of:

establishing a common negotiation protocol that specifies negotiation operations, the negotiation protocol being agreed upon by the ~~plurality of parties~~ first party and the second party prior to the negotiation;

conducting a pre-negotiation between the ~~plurality of parties~~ first party and the second party to form a template prior to the negotiation in accordance with the negotiation protocol, wherein the template is formed at least in part from information provided by at least one of the ~~plurality of parties~~ first party and the second party in at least one electronic document, prior to the negotiation, wherein the template contains business logic for performing a negotiation electronically;

registering the business logic, prior to the negotiation, with a server accessible by one or more ~~parties~~ of the first party and the second party; and

PATENT

Atty. Dkt. No. YOR920010137US1

implementing the business logic in a fully automated negotiation conducted automatically between ~~computer systems~~ the first computer system and the second computer system over the communication network,

wherein each of the ~~plurality of parties~~ first computer system and the second computer system maintains a contract state of the negotiation.

13. (Currently Amended) The method of claim 12, wherein the template is registered with the server prior to conducting ~~[[a]]~~ the fully automated negotiation automatically between ~~computer systems~~ the first computer system and the second computer system over the computer network.

14. (Original) The method of claim 12, wherein the server maintains negotiation logic for processing a negotiation request that is customized to the contract template.

15. (Currently Amended) A method for conducting a negotiation between a ~~plurality of parties~~ first party having a first server and a second party having a second server, each of said ~~plurality of parties having a first server and the second server being~~ coupled to a communication network and having one or more applications running thereon, comprising the steps of:

providing a specification of machine-executable rules of negotiation for the ~~plurality of parties first server and the second server~~ for generating at least one contract, the specification being agreed upon by the ~~plurality of parties~~ first party and the second party prior to conducting the negotiation;

enabling ~~an automatic~~ a fully automated negotiation to take place between the ~~servers~~ first server and the second server in accordance with the specification of machine-executable rules; and

conducting a pre-negotiation between the ~~plurality of parties~~ first party and the second party to form a meta contract for controlling ~~a negotiation process~~ the fully automated negotiation in accordance with the specification, wherein the meta contract is formed at least in part from information provided by at least one of the ~~plurality of parties~~ first party and the second party in at least one electronic document, prior to the

PATENT

Atty. Dkt. No. YOR920010137US1

negotiation,

wherein each of the ~~plurality of parties~~ first server and the second server maintains a contract state of the negotiation.

16. (Original) The method of claim 15, wherein the meta contract defines at least one of: general information pertaining to the formation of a contract; roles and participants in the negotiation; a delivery channel; a transport protocol; a document exchange protocol; a negotiation protocol; sequencing rules; and policy constraints.

17. (Original) The method of claim 16, wherein the negotiation protocol specifies actions to be performed in a negotiation, including at least one of: making an offer; rejecting an offer; making a counter offer; and accepting an offer or counter offer.

18. (Currently Amended) The method of claim 17, wherein the negotiation protocol provides a suspension request to be sent to at least one of the ~~servers~~ first server and the second server for a suspension of a negotiation to allow human intervention

19. (Previously Presented) The method of claim 17, wherein the negotiation protocol provides for a resumption of an automatic negotiation upon termination of human intervention.

20. (Original) The method of claim 18, wherein the suspension request specifies a suspension time interval in which human intervention is enabled.

21. (Currently Amended) The method of claim 20, wherein the at least one of the ~~servers~~ first server and the second server that receives the suspension request waits until the suspension time interval expires before it takes further action.

22. (Original) The method of claim 16, wherein the negotiation protocol specifies actions to be performed in a negotiation, including at least one of: starting a sub negotiation; committing a sub negotiation; accepting a sub negotiation, and aborting a

PATENT

Atty. Dkt. No. YOR920010137US1

sub negotiation.

23. (Currently Amended) The method of claim 15, wherein at least one of the ~~plurality of parties~~ first server and the second server further has a client application for performing at least one action of the meta contract by a human operator.

24. (Original) The method of claim 23, wherein the client application has a graphical user interface.

25. (Original) The method of claim 15, wherein the meta contract contains a complete set of rules for determining the validity of meta contract actions invoked during a negotiation.

26. (Original) The method of claim 15, wherein the meta contract invokes at least one business specific method for determining the validity of a meta contract operation.

27. (Original) The method of claim 15, wherein the meta contract invokes at least one business specific method for determining the response to a meta contract operation.

28. (Currently Amended) A method for conducting a negotiation between a ~~plurality of parties~~ first party having a first computer system and a second party having a second computer system, each of said ~~plurality of parties having a first computer system and the second~~ computer system being coupled to a communication network and having one or more applications running thereon, comprising the steps of:

providing a specification of machine-executable rules of negotiation for the ~~plurality of parties~~ first computer system and the second computer system for generating at least one contract, the specification being agreed upon by the ~~plurality of parties~~ first party and the second party prior to conducting the negotiation;

conducting a pre-negotiation between the ~~plurality of parties~~ first party and the second party to form a meta contract to control the negotiation, in accordance with the

PATENT

Atty. Dkt. No. YOR920010137US1

specification, wherein the meta contract is formed at least in part from information provided by at least one of the ~~plurality of parties~~ first party and the second party in at least one electronic document, prior to the negotiation; and

enabling an ~~automatic~~ a fully automated negotiation to take place between the ~~plurality of parties~~ first computer system and the second computer system in accordance with the specification of machine-executable rules;

wherein ~~at least one of the plurality of parties~~ a third party having a third computer system is an intermediary for facilitating the ~~automatic~~ a fully automated negotiation,

wherein each of the ~~plurality of parties~~ first party, the second party, and the third party maintains a contract state of the negotiation.

29. (Currently Amended) The method of claim 28, wherein at least one of the ~~plurality of parties~~ first party and the second party delegates at least part of the negotiation ~~process~~ to a broker.

30. (Cancelled)

31. (Currently Amended) A method of conducting a negotiation over a data communication network between a service provider having a server computing system and a service requester having a client computing system, comprising the steps of:

establishing, by the service provider and the service requester, a common negotiation protocol that specifies negotiation operations, the negotiation protocol being agreed upon by the service provider and the service requester prior to the contract negotiation;

conducting a pre-negotiation between the service provider and the service requester to form a negotiation meta-contract to control the negotiation, in accordance with the negotiation protocol, wherein the meta contract is formed at least in part from information provided by at least one of the service provider and the service requester in at least one electronic document, prior to the negotiation;

receiving, at the ~~service provider~~ server computing system, a request to

PATENT

Atty. Dkt. No. YOR920010137US1

negotiate from the ~~service-requester~~ client computing system;

responsive to the request to negotiate, ~~automatically negotiating~~ conducting a fully automated negotiation with the ~~service-requester~~ client computing system by the ~~service-provider~~ server computing system in accordance with the negotiation meta-contract,

wherein each of the ~~service-provider~~ server computing system and the ~~service requester~~ client computing system maintains a contract state of the negotiation.

32. (Currently Amended) The method of claim 31, wherein the step of ~~automatically negotiating~~ conducting a fully automated negotiation with the ~~service-requester~~ client computing system by the ~~service-provider~~ server computing system comprises one of: sending an offer, sending an acceptance, sending a counter offer, sending a rejection, aborting the negotiation, suspending the negotiation, and committing the negotiation.

33. (Currently Amended) A method of conducting business over the Internet, wherein ~~parties~~ a first party and a second party negotiate contractual terms between ~~two~~ a first data communication network component and a second data communication network component, the method comprising the steps of:

providing a specification of machine-executable rules of negotiation for generating at least one contract, the specification being agreed upon by the ~~parties~~ first party and the second party prior to negotiating the contractual terms;

conducting a pre-negotiation between the ~~parties~~ first party and the second party to form a meta contract to control ~~[[the]]~~ negotiating, in accordance with the specification, wherein the meta contract is formed at least in part from information provided by at least one of the ~~parties~~ first party and the second party in at least one electronic document, prior to ~~[[the]]~~ negotiation; and

originating a fully automated negotiation at ~~[[a]]~~ the first one of the parties data communication network component in accordance with the rules of negotiation,

wherein each of the ~~parties~~ first data communication network component and a second data communication network component maintains a contract state of the negotiation.



PATENT

Atty. Dkt. No. YOR920010137US1

34. (Cancelled)